



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**FACULTY OF SCIENCES**  
**DEPARTMENT OF ENVIRONMENTAL SCIENCE**  
**Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja**  
**2021\_2 EXAMINATIONS**

**COURSE CODE: ESM392**

**COURSE TITLE: Introduction to Remote Sensing and Radiation Principles**

**CREDIT UNIT: 2**

**TIME: 2Hours**

**Instruction:** Attempt question number ONE (1) and any other THREE (3) questions. Question number one (1) carries 25 marks, while the other questions carry (15) marks each.

- 1.a. Explain the concept of energy interactions in the atmosphere.
- 1.b. How does the atmosphere influence energy distribution?
  
2. Identify and explain the key remote sensing platforms.
  
3. a. Write detail notes on the under listed types of Aerial Photograph;
  - i. Vertical aerial photos
  - ii. Oblique aerial photos
- 3.b. List five types of Aerial Cameras
  
4. Write detail notes on the following
  - i. Image displacement on aerial photograph.
  - ii. Tone.
  - iii. Resolution.
  
- 5.a. Highlight the procedure of transferring annotated details to the base map after interpretation.
- 5.b. Highlight the procedure of Radial Line Triangulation.